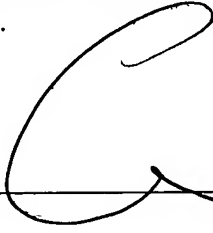Modified PTO/SB/33 (10-05)

| PRE-APPEAL BRIEF REQUEST FOR REVIEW | Docket Number |
| | Q76569 |

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	Filed
	10/625,750	July 24, 2003
	First Named Inventor	
	Tetsuya SHIGETA	
	Art Unit	Examiner
	2629	LAO, LUN YI

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal

The review is requested for the reasons(s) stated on the attached sheet(s).
    Note: No more than five (5) pages may be provided.

☑ I am an attorney or agent of record.
    Registration number   41,278

Signature

Grant K. Rowan
Typed or printed name

(202) 293-7060
Telephone number

November 22, 2006
Date

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of   Docket No: Q76569

Tetsuya SHIGETA, et al.

Appln. No.: 10/625,750   Group Art Unit: 2629

Confirmation No.: 8136   Examiner: LAO, LUN YI

Filed: July 24, 2003

For: METHOD FOR DRIVING A PLASMA DISPLAY PANEL

<u>PRE-APPEAL BRIEF REQUEST FOR REVIEW</u>

MAIL STOP AF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to the Examiner's final Office Action dated June 22, 2006, Applicants file this

Pre-Appeal Brief Request for Review, along with a Notice of Appeal.

Claims 46-61 are rejected under 35 U.S.C. § 112(1) because the specification allegedly

does not describe the relative brightness levels in independent claims 46, 49, 52, and 57.

Applicants respectfully disagree.

With respect to claim 46, the application describes an example of a method which

alternately performs a first light-emission drive sequence (Fig. 46A) to display odd fields (A) (or

odd frames) and a second light-emission drive sequence (Fig. 46B) to display even fields (B) (or

even frames). (Page 73:6-9). Also, in Fig. 49, a brightness level (*e.g.*, level 29 or 46) of

brightness points "□" are obtained at a single pixel by carrying out the first light-emission

drive sequence for the odd fields (A), and a brightness level (*e.g.*, level 23 or 37) of brightness

points "◊" are obtained at a single pixel by carrying out the second light-emission drive

sequence for the even fields (B). (Page 79:6 to page 80:16).

A brightness level (*e.g.*, level 37) of brightness points "■" between adjacent brightness

points "□" are obtained by carrying out the first light-emission drive sequence for the odd fields

(A) as a result of multi-level gray-scale processing, such as dither processing. Similarly, a brightness

level (*e.g.*, level 29) of brightness points "■" between adjacent brightness points "◊" are

obtained by carrying out the second light-emission drive sequence for the even fields (B) as a

result of dither processing. (Page 79:25 to page 80:10).

In Figs. 15-18, a circuit 330 performs error diffusion processing on pixel data HDp to create

pixel data ED. The pixel data ED corresponds to a pixel G(j, k) and is generated based on error data

corresponding to pixels G(j, k-1), G(j-1, k-1), G(j-1, k), and G(j-1, k+1). (Figs. 15 and 16; page

30:22 to page 32:5). Also, a circuit 350 performs dither processing on the pixel data ED to obtain

multi-level gray-scale data Ds. (Page 32:14-19). By performing the dither processing, a plurality of

adjacent pixels can express one intermediate display level. (Page 32:21-23). For example, in Figs.

17 and 18, the circuit 350 obtains the data Ds by generating and processing dither coefficients a, b, c,

and d for four pixels G(j, k), G(j, k+1), G(j+1, k), and G(j+1, k+1). (Page 33:17 to page 36:3).

As described above, the specification adequately describes a non-limiting example of a

method in which the brightness level (*e.g.*, level 29) of respective gray-scale brightness points

"□" are obtained at a single pixel by carrying out the first light-emission drive sequence for the

odd fields (A). Furthermore, as shown in Fig. 49, the brightness level 29 is set to coincide with the

brightness level (*e.g.*, level 29) of respective gray-scale brightness points "■" that are obtained

at a group of pixels (*e.g.*, pixels G(j, k), G(j, k+1), G(j+1, k), and G(j+1, k+1)) by carrying out

the second light-emission drive sequence for the even fields (B) as a result of multi-level gray-scale

processing (*e.g.*, dither processing). For at least the above reasons, claim 46 satisfies 35 U.S.C. §

112(1). Also, Applicants submit that claim 52 is patentable for similar reasons.

In addition, Fig. 51 and the corresponding description in the specification disclose a non-

limiting embodiment in which a brightness level (*e.g.*, level 39) of respective gray-scale brightness

points "□" are obtained at a single pixel by carrying out the first light-emission drive

sequence for the odd fields (A). Furthermore, the brightness level 39 is set to differ with a

brightness level of respective gray-scale brightness points "■" that are obtained at a group of

pixels (*e.g.*, pixels G(j, k), G(j, k+1), G(j+1, k), and G(j+1, k+1)) by carrying out the second

light-emission drive sequence for the even fields (B) as a result of multi-level gray-scale processing

(*e.g.*, dither processing). Accordingly, Applicants submit that claim 49 satisfies 35 U.S.C. § 112(1).

Also, Applicants submit that claim 57 is patentable for similar reasons.

Since the Examiner only rejected dependent claims 47, 48, 50, 51, 53-56, and 58-61 due to

their dependency on claim 46, 49, 52, or 57, Applicants submit that these claims are patentable.

In the Advisory Action of November 8, 2006, the Examiner maintains the rejection under 35

U.S.C. § 112(1). She acknowledges that the specification discloses that the brightness level of

respective gray-scale brightness points, which is obtained at a single pixel by carrying out the first

light-emission drive sequence, is set to coincide with the brightness level of respective gray-scale

brightness points obtained at a group of pixels. However, she contends that the brightness level at

the group of pixels are obtained by carrying out <u>both</u> the <u>first and second</u> light-emission drive

sequences. Thus, she maintains that the specification does not disclose obtaining a brightness level at

a group of pixels based on <u>only</u> the second light-emission drive sequence.

Assuming *arguendo* that the claim requires obtaining the brightness level at a group of pixels

based only on the second light-emission drive sequence, Applicants respectfully disagree. For

example, as shown in Fig. 24 and described in the specification, when pixel data represents a

brightness level of "116," the level "116" is set to coincide with a brightness level of respective

gray-scale brightness points that are obtained at a group of pixels (*e.g.*, pixels $G(j, k)$, $G(j,$

$k+1)$, $G(j+1, k)$, and $G(j+1, k+1)$) by carrying out the second light-emission drive sequence for the

even fields as a result of dither processing. Specifically, in the second field, the pixels $G(j, k)$, $G(j,$

$k+1)$, $G(j+1, k)$, and $G(j+1, k+1)$ respectively have the brightnesses $\{155, 104, 104, 104\}$. Also,

these brightnesses $\{155, 104, 104, 104\}$ have an average brightness of approximately 116 (*i.e.*, (155,

104, 104, 104)/4 $\approx$ 116).

Furthermore, as described in the specification, during the fourth, sixth, and eighth fields, the

brightnesses of the pixels $G(j, k)$, $G(j, k+1)$, $G(j+1, k)$, and $G(j+1, k+1)$, which are based on the

second light-emission drive sequence, respectively change to $\{104, 104, 104, 155\}$[1], $\{104, 104, 155,$

$104\}$, and $\{104, 155, 104, 104\}$. (Page 43:14-18; page 44:12 to page 45:4; page 45:11-17). Since

Fig. 24 illustrates an example of dither processing in which a brightness level of 116 is obtained at

a group of pixels (*e.g.*, pixels $G(j, k)$, $G(j, k+1)$, $G(j+1, k)$, and $G(j+1, k+1)$) by carrying out the

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[1] Please note that Fig. 24 contains an error because it shows that, in the fourth field, the pixels $G(j, k)$, $G(j, k+1)$, $G(j+1, k)$, and $G(j+1, k+1)$ respectively have the brightnesses $\{82, 128, 128, 128\}$. However, as described at pages 43-45 of the specification, these brightnesses clearly should be $\{104, 104, 104, 155\}$.
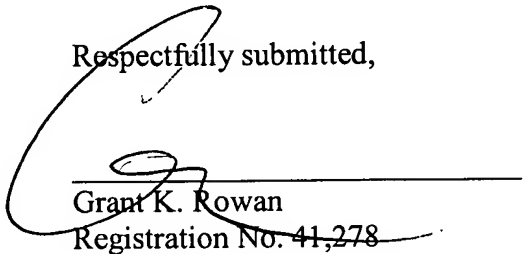
only second light-emission drive sequence, Applicants respectfully submit that the specification

adequately supports the claimed features, as interpreted by the Examiner.

Accordingly, Applicants submit that claim 46-61 are patentable under 35 U.S.C. § 112(1).

TheUSPTO is directed and authorized to charge all required fees, except for the Issue Fee

and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments

to said Deposit Account.

Respectfully submitted,

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